

# Multiple Tobacco Related Lesions with Squamous Cell Carcinoma – A Case Report

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## ABSTRACT

Oral squamous cell carcinoma is the most commonly occurring malignant disease worldwide. The oral squamous cell carcinoma shares clinical similarity with various forms of inflammatory gingival lesions and is often misdiagnosed in our routine dental practice. Oral tongue carcinomas represent approximately 25% of oral cavity carcinomas. These lesions are characterized by early infiltration into the underlying tongue musculature with an early and high risk for regional metastases. The dentist should have precise knowledge regarding the clinical manifestation of this deadly disease as early diagnosis and prompt treatment. Early detection of such lesions can help in reducing morbidity and mortality.

Keywords: Oral squamous cell carcinoma, tongue malignancy, OSCC, clinical course, tobacco related lesions, leukoplakia, oral submucous fibrosis, smoker's melanosis.

## INTRODUCTION

Squamous cell carcinomas encompass at least 90% of all oral malignancies. (1) Oral tongue carcinomas represent approximately 25% of oral cavity carcinomas. These lesions are characterized by early infiltration into the underlying tongue musculature with an early and high risk for regional metastases.

(2) Carcinoma of the tongue is constituting about 3% of all cancer affecting the human population globally. Tobacco use mainly in the form of cigarettes or smokeless form is one of the predominant factors affecting the patients with tongue cancer.

(3) Biologically, oral cancers may develop from premalignant dysplastic lesions, which are clinically present in erythroplakia, leukoplakia, lichen planus, or combinations of these conditions. In such cases with premalignant lesions, frequent exposure to well [1] established carcinogens such as alcohol, tobacco, betel nut, and human papillomavirus (HPV) infection may promote oral cancer formation. After oral SCCs are generated, tumor cells can deeply invade the local structures and lymph nodes of the neck, leading to further distant metastases. These adverse biological features strengthen the recurrence propensity of oral

SCC (4). However, as not all persons who practice these high-risk habits will develop oral SCC, and as oral SCC may be idiopathic, there must be person-specific genetic characteristics and environmental factors which may either afford protection against the development of oral SCC, or may predispose to or even promote the development of oral SCC. (5) (6)

## A CASE REPORT

A 32-year-old-male patient came to the department of oral medicine and radiology with the chief complaint of burning sensation of mouth on consuming spicy food and also complained of inability to open the mouth for past 2 months. He has been chewing smokeless form of tobacco for 5 years (1 pack/day) which he quit before 1 year and he also has a habit of smoking cigarette for past 2 years (4-5 cigarette per day)

On Intraoral examination an ulcero-proliferative growth was evident on the right lateral border of the tongue which approximately measured about is 3.0 x 2cms. Lesion appeared to be Erythematous with small areas of keratosis seen in the distal part of the lesion, on palpation the Growth was tender, edge was

raised and base was indurated. Diffuse hyperpigmentation with a Single, localized, Greyish-white patch was seen in left buccal mucosa which was 1cm away from the commissure of the lip, measuring roughly about 2x2cm, surrounded with hyperpigmented area and has cracked-mud surface, On Hyperpigmented area was evident in the right buccal mucosa and the surface appeared to be rough. On palpation vertical fibrotic band were palpable on both Right and Left Buccal mucosa. Restricted mouth opening observed with inter-insisal distance of 32mm was evident. (Figure 1 and 2)



Figure 3: Palate

Corelating the history and the clinical examination of the ulcero-proliferative growth of the tongue lesion we postulated it to be a chronic non-healing ulcer of the tongue other diagnosis included Oral Submucous Fibrosis in Right and left buccal mucosa, Leukoplakia in Left Buccal mucosa, Smoker's Melanosis in in Left and Right Buccal mucosa and Nicotina palatine in hard palate. A surgical consent was obtained from the patient for biopsy. An Incisional biopsy under local anesthesia was performed. The histopathology showed a moderately differentiated- squamous cell carcinoma. (Figure 4, 5 and 6)



Figure 1: Left Buccal Mucosa



Figure 2: Right Buccal Mucosa

Examination of Palate Diffused Greyish-white area seen with small nodular excrescences having small central red spots all over the palate extending anteriorly from the incisive papillae to posteriorly till the soft palate. (Figure 3)



Figure 4: Ulcero-proliferative growth of the tongue lesion





Figure 5: Incisional Biopsy of Right lateral border of tongue

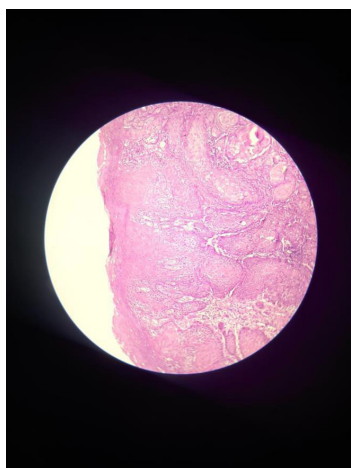


Figure 6: Histopathological image of Oral Squamous Cell Carcinoma

The patient was transferred to ACS Medical College and Hospital. Contrast CT imaging was taken, A Hypodense mass was evident in left lateral border of \_\_\_\_\_ tongue measuring about 3x4cm, no evidence of locoregional lymphatic spread or distant metastasis could be found which led to a cT2N0M0 staging. Surgically, A Right partial glossectomy was done and selective neck dissection of levels I to III was performed.

The histological analysis of the excised lesion confirmed the presence of a Well-differentiated squamous cell carcinoma of the right lateral border of tongue. The surgical excision margins were all safely clear of tumor and no positive lymph nodes were evident. A standardized follow up protocol was followed.

## DISSCUSION

Oral squamous cell carcinoma may present clinically as leukoplakia or as erythroplakia that in fact has already become malignant, as a necrotic ulcer with irregular raised indurated borders or as a broad-based exophytic mass with a surface texture that can be relatively smooth, verrucous or pebbled. Based on site and appearance the other ulcers which we could consider are tuberculosis ulcer (TB), Traumatic ulcer, syphilitic ulcer and eosinophilic ulcers.

Oral TB lesions may be either primary or secondary in occurrence, oral lesions may be present in a variety of forms, such as ulcers, nodules, tuberculomas, and periapical granulomas, may occur at any location on the oral mucosa, but the tongue is most commonly affected (7,8,9). Syphilis may be presented as a painless and non-inflammatory bilateral satellite adenopathy of submandibular and cervical lymph nodes. Primary infection characterized by chancre. lip is most common followed by tongue (10,11). An eosinophilic ulcer is a rare, chronic, benign and often self-limiting lesion of the oral mucosa. The ulcer most frequently occurs on the tongue and is characterised by the presence of indurated borders resembling malignancy (9). But one striking feature is a white-yellow fibrinous base (10). On Consideration of the various etiological factors, duration, induration of the base traumatic ulcer was excluded.

## CONCLUSION

Early detection, Health education and appropriate treatment planning should be considered to be most important priority in order to prevent this life-threatening disease. We as dentist play a major role in counselling of the patients who are already affected guiding them for few psychological sessions so that patient is aware and starts the treatment as early as possible.

## DECLARATION

The autors verify that they have obtained all appropriate patient consent forms. In the forms the patient(s) has/have given his/her consent for his/her/their images and other clinical information to be reported in the journal.

Conflicts of interest:

There are no conflict of interest.

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